The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
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August 15, 1984

Merrill S. Hohman, Director
Waste Management Division
U.S. Environmental Protection Agency, Region I
JFK Federal Building
Boston, Massachusetts 02203

Dear Mr. Hohman:

The Department is providing comments on EPA's draft document of July, 1984, entitled "Feasibility Study of Remedial Action Alternatives, Acushnet River Estuary above Coggeshall Street Bridge, New Bedford." The comments are limited to the accuracy of the document itself; technical comments on the contents of the document will be provided at a later date. The comments provided below are presented as general comments and specific comments.

I. General Comments:

The document does not provide adequate emphasis, especially in the discussion of remedial action objectives, on the alleviation and abatement of the public health hazard associated with the PCB and heavy metal contamination on this site. The tone of the objectives discussed seems to favor the economic and environmental impacts relative to the contamination. The latter impacts are certainly significant, but the Department is requesting that the public health hazards be provided more and primary emphasis in the document, especially in the discussion of the objectives of the remedial action alternatives.

The document also discusses the contamination and the remedial action alternatives relative to both the PCB and the heavy metal hot spot areas. The document should clarify the priority of the remedial action, if any, relative to these two classes of contaminants. The document, as it presently reads, places equal priority on the removal of both classes of contaminants. If that is in fact the intended position, then more details should be provided on the removal of the metal contaminants. In particular, the level of clean-up for the heavy metal contaminants should be identified and discussed.

In addition, the document should provide a more emphatic statement that the remedial action would undergo all necessary regulatory reviews throughout its planning and implementation. This would include the reviews needed for regulatory variances and exemptions.

Finally, the document should provide a clearer comparison of the effectiveness of each of the proposed remedial actions. This is necessary for informed decision making and remedial action selection.

II. SPECIFIC COMMENTS:

Page ES-1; The first two and the second to last sentences of the first paragraph should be modified as follows: "The United States Environmental Protection Agency... assigned the New Bedford Harbor/Acushnet River Estuary site... on July 1981. The New Bedford site was nominated by the Commonwealth of Massachusetts as its first priority site for the List due to the widespread contamination of polychlorinated biphenyls (PCBs) in the area.... This fast track study was requested by the EPA and The Commonwealth of Massachusetts since the extremely high levels of PCBs in these locations...."

It is inaccurate to infer that this study will include heavy metal hot spot areas. The heavy metal data from Ellis, et al (1977) identify this hot spot as being south of I-195 to Route 6; while it is true that heavy metals are found with PCBs, north of Coggeshall Street, their removal is only a result of the PCB clean-up, not an effort to remove heavy metal hot spots. The references in the above sentences, therefore have been removed.

Page ES-1 to ES-2, and page 1-2; The section, Study Objectives, should be modified to emphasize the public health hazards of the site contamination; it should be consistent with the prior paragraph's statement of immediate risk to public health in the hot spot locations. Suggested modifications to the paragraph are as follow:

"The objectives... for the PCB hot spot areas...:

- o To decrease the immediate risk to public health. The high levels of PCBs in the hot spot areas currently pose a potential public health threat due to the hazards associated with..., indirect uptake of the PCBs through the ingestion of....
- o To decrease the impact to public health and welfare posed by the contaminated aquatic and terrestial organisms and resources. The animal and plant communities...have been heavily contaminated by the high levels of the chemicals. If left unremediated the contamination will spread until the entire population becomes unfit or unavailable to the food chain, and ultimately for human consumption.
- o To decrease the public health and welfare risk associated with the migration of the contaminants from the hot spot to other less or uncontaminated areas. The progressive movement... exacerbates the current water quality and related parameters...."

Page ES-2, L15; "..areas in relation to engineering feasibility criteria, public health and environmental impacts,..."

Page ES-2, L18; omit the word adverse that starts this line.

Page ES-4, L9; "...capacitors have brought a series of contamination problems to the area."

Page ES-4, L16; "...disposal of the wastes by industries...."

Page ES-4; The data identifying a heavy metal hot spot north of Coggeshall Street should be referenced. A breakdown of this data should be appended to the report.

Page ES-4, L19; "PCB and heavy metal contamination..."

Page ES-4, L22-24 and pg 3-6; "...severely degraded by PCB and metal contamination. The Commonwealth of Massachusetts in September 1979 closed the estuary to all fishing as a result of the PCB contamination."

ES-4, L25-26, and page 3-6; the statements on eel and lobster contamination are misleading. More details should be provided to specify the numbers contaminated.

Page ES-5; The discussion on the FDA action level should be reworded. For clarification, the following is recommended, "Median PCB concentrations for numerous species of finfish are also above the recently redefined U.S Food and Drug Administration action level. The PCB concentration in the edible portion of fish considered safe for human consumption is 2 ppm, lowered from 5 ppm."

Page ES-5 L16; "...will be sustained and can become exacerbated and more widespread."

Page ES-6, L5; "...the highest level of risk to public health and welfare among the proposed remedial action alternatives."

Page ES-6, L7; "...sediment, and biotic environments pose a persistent and accumulative risk for an indefinite period..."

Page ES-6 L8-9; define and explain the sentence; there is a contradiction between the statement on ingestion and the current ban (on fishing).

Page ES-6, L21-23; "Although these latter economic impacts are indirectly related to the contamination in the hot spot areas, ...downstream less contaminated areas....will perpetuate and exacerbate the existing conditions..."

Page ES-6, L27; "...socioeconomic, environmental, and health issues."

Page ES-10, L7; "...contaminated dredge spoils..."

Page ES-10, L28, define average concentrations (arithmetic average?).

Page ES-11, L2; "...the public health, public welfare, and environment."

Page ES-11, L5; "...contribute to airborne and waterborne contamination."

Page ES-11, L6; "the upper estuary sediment..."

Page ES-11; The paragraph "Each of the four remedial action alternatives will clean up or isolate the PCBs and metals in the Acushnet River Estuary..." should be replaced with the following. "Each of the four remedial action alternatives will remove or isolate the PCBs and metals in the Acushnet River Estuary upstream of Coggeshall Street Bridge so that their transport to the harbor and bay is prevented. This will avoid the compounding of the contamination already in the harbor and bay, thereby reducing any exacerbation to the public health, welfare, and environment.

Page ES-11; The Chapter makes explicit statements relative to the removal of both the PCBs and the heavy metals (hot spots). Standards for the cleanup of the PCBs have been provided. Standards for the heavy metals cleanup are absent and should also be provided.

Page ES-12, L6; "Sediment dredging imposes the risk of resuspending contaminated sediments into the water and air.

Page ES-12, L10; "...contaminant suspension or release will occur."

Page ES-12, beginning of last paragraph; "Disposal in an upland site will not totally elininate all impacts to the salt marshes, since these marshes may be heavily contaminated and may require dredging."

Page ES-13, L11-14; "...scenario for implementing a remedial action is that a variance or exemption to.... To obtain these variances and exemptions, the proposed actions and standards must satisfy specific requirements as outlined in the respective regulations. The regulating agencies will review the proposed remedial action alternatives for regulatory compliance and the requests for variances and exemptions for appropriate decision and action. Each of the remedial actions..."

Page ES-13, start of second paragraph; "Serious public health, environmental, and ..."

Page ES-15, L6; "...contaminated sediments to new and uncontaminated areas and communities that are not..."

Obviously, the changes recommended in the above Executive Summary pages should be carried over to the subsequent pages and chapters and similar changes be made in the relevant sections.

Page 1-1, end of first sentence; insert the following: "...,qualifying the site for monies and resources created by the Act."

Page 1-3, last paragraph, L4; define average value.

Page 1-8; It should be clarified that the data system managed by Metcalf and Eddy Inc merely catalogued existing data from other sources and was not a scientific research effort by Metcalf and Eddy., Inc.

Page 2-2; An improper perspective of the extent of PCB contamination is presented by Figure 2-1. The impression given is that all of the harbor is the hot spot area. It is suggested that a map showing the harbor from the Hurricane Barrier to Tarkiln Hill Road and outlining the hot spot area be used to show the relative extent of gross contamination.

Page 2-17; Should soft shelled clam and quahog be included in the list of fauna found in New Bedford Harbor and Buzzards Bay?

Page 3-1, L2-3; "...identified and assessed in terms of the impacts on public health, public welfare, and the environment."

Page 3-8, Section 3.2.3; The first paragraph purports that the existing undeveloped salt marsh areas in the upper Acushnet estuary are also "believed to exhibit high levels of contamination since they are similarly hydraulically connected to (contaminated) estuarine sediments.". (This hypothesis is reiterated in the Environmental Impacts Sections 8.1.3) It also states that no data has yet been collected on PCBs and metals concentrations in the salt marsh areas that are proposed for dredged material containment and disposal of the estuarine sediments. The former a priori assumption is not substantiated by the quantitative evidence as stated in the latter sentence and should be amended accordingly to avoid the allusive conclusion that filling of the wetland areas is justified or at least plausible since they are contaminated as well.

Page 3-10; Reference to Figure 3-2 was omitted from the note "For PCB concentrations in this area, see enlarged plan, Figure 3-2".

Page 3-23; In section 3.3.2 should the initial category of potential receptors read "Consumers of contaminated fish, birds and mammals" rather than "...foods, birds and animals"?

Page 3-25; There is a national Ambient Air Quality Standard set by USEPA for lead. That standard is a 90 day average of 1.5 ug/M^3 for an annual quarter. This standard should be used instead of the OSHA standard.

Page 3-26; Volatilization of PCBs from exposed intertidal areas also provides direct contact to receptors.

Page 3-26; The third paragraph should include a note to emphasize the prohibition of clamming and fishing.

Page 3-26; The reference to risks of carcinogenic efforts from PCB exposure should be modified since PCBs are only suspected of being a cancer causing substance.

Page 3-28; The last sentence of the first paragraph should be reworded to say "obviously the ADI will be exceeded if contaminated fish or shellfish are eaten on a regular or even intermittent basis".

Page 3-32, 3-35 and 3-36; An alternate word to human habitat should be used. Residential community is a recommended alternative.

Page 3-34, Section 3.5.2; Constraint is misspelled. Also, the major constraint to waterfront and marina development is disposal of contaminated dredged material. The feasibility study remedial action alternatives will not remove this constraint, unless the selected alternative allows disposal of these materials from non-hot spot areas. This should be so stated.

Page 4-1, second bullet; reword/replace as follows: "Some activities will lack precedence in the implementation of the Commonwealth of Massachusetts' hazardous waste laws, regulations, and policies, which are being finalized concurrently with this study."

Page 4-1; Since a salt marsh is a type of wetland the last paragraph should possibly read"...aquatic resources of the study area, which include fish, crustaceans, freshwater wetlands, salt marshes, etc."

Section 6.2;

Except for the "no-action" alternative, each of the proposed remedial action alternatives identified in this section will require regulatory review pursuant to M.G.L. Chapter 91 and M.G.L. Chapter 131, S.40, the Waterways and Wetlands regulations, respectively (as well as other environmental statutes).

The proposed remedial action alternatives involving dredging and the discharge of dredged or fill material channelward of the mean high water shoreline in the upper Achushnet River Estuary, falls with the jurisdiction of Chapter 91 pursuant to sections 313(a) and 404(t) of the Federal Water

Pollution Control Act. Those sections of the Act provide State agency control (regulation) of federally authorized discharges of dredged or fill material in any portion of the navigable waters within jurisdiction of the State.

Pertinent criteria for Ch. 91 evaluation includes, among other things; hazards to navigation, structural stability, rights of the public in tidelands, protection of marine resource areas and rights of adjacent littoral property owners.

The anticipated adverse impact on existing vegetated wetlands (salt marsh) communities presented in the In-Harbor Dredge Material Disposal scenarios appears to be inconsistent with the general performance standard applicable to projects affecting a salt marsh resource area pursuant to Section 32(3) of the Coastal Wetlands Regulations; 310 CMR 10.32(3). Consequently, in order to secure proper authorization to permanently displace these extensive salt marsh areas, a request for a variance will be required under Section 36 of the Coastal Wetlands Regulations.

The need for the above and other regulatory reviews prior to, during, and after implementation of remedial actions should be noted in the discussion of remedial alternatives.

Page 6-8, Section on Ability to Minimize Community Impacts; the entire last sentence should be deleted in this section.

Page 6-9; If the terms "Upper and Lower Harbor areas" are interchangeable with "Inner and Outer Harbor Areas" then "Inner and Outer" should be used for consistency. If they are not interchangeable, "Upper and Lower" should be defined.

Page 6-17, L22; "...approximately 4.5 years for completion, or longer if the available storage..."

Page 7-9; The possible regulatory aspects of obtaining clean sediments from Buzzards Bay should be discussed with the Massachusetts Department of Environmental Management, Ocean Sanctuaries Program.

Section 7, Unlined and lined containment alternatives; Since these alternatives will have an impermeable membrane on the side walls the only difference will be one with a bottom liner. It is recommended that this be made more clear in the discussion, and that the alternative be called incomplete liner, and complete liner. As now discussed, the impression is given that one alternative will have no liner, unless Figure 7-8 is closely reviewed.

Section 7; The need to monitor water quality of surface water pumped from each containment site and the supernatant from dewatering sediments as required by DEQE/DWPC should be noted.

The Department looks forward to the continued coordination of activities in this complex Superfund site. If you have any questions or comments, please contact Ms. Yee Cho of the Division of Hazardous Waste at 292-5591.

Very truly yours,

Thomas F. McLoughlin
Acting Commissioner

TFM/YC/pb

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